Soviet scientists called star wars' hypocrites

submarines. O fluctear missile submarines. The also said American-Soviet sci-fentific cooperation should not be renewed under the recent thaw in bilateral 'relations' until the Soviet Union releases Nobel Laureate Andrei Sakharov from internal exile in the Soviet Union.

Mr. Perle, speaking on Capitol Hill at a meeting sponsored by the Andrei Sakharov Institute, said the United States is "on the verge" of re-establishing scientific exchanges that were canceled in 1980 after

Soviet, authorities, banished Mr. Sakharov to a remote city where he reportedly is, under virtual house arrest. He said he opposed such an

arrest. He said he opposed such an effort.

Of the Soviet scientific community by attitude, toward the Strategic Defense: Initiative, Mr. Perle said Soviet scientists published a letter in the Soviet Community Party newspaper Pravda shortly after, President Reagans March 1983 speech on space defense. The letter, he said "deplored" the beginning of U.S. research on strategic defense.

The U.S. intelligence community was asked to identify the scientists, Mr. Perle said. "Among the most prominant significance of the scientists."

Mr. Perle said.

"Among the most prominant signers of that letter was the man in charge of the Soviet strategic defense, program, the man who designed the anti-ballistic missile system around Moscow, the designer of the Typhoon-class Soviet ballistic missile submarine, the designer of the third-generation Soviet intercon-

tinental ballisitic missile — virtually all the leadership of the Soviet scientific imilitary industrial complex."

Mr. Perle said.

A recenit CIA report on Soviet scientists opposed to U.S. space defense efforts identified the vice president of the Soviet Academy of Sciences, Yevgeniy Velikov, as the "central figure" in the Soviet laser- and particlebani weapons research.

Mr. Perle said Soviet hypocrisy toward strategic defense has been reinforced in Soviet negotiating positions' during the Geneva arms talks. Since the talks began earlier this year, the Soviet Union has called for a halt to all U.S. space defense research while continuing its own program of strategic defense.

"One of the reasons why Andrei Sakharov was exiled in Gorky is because he would not join in that hypocrisy." Mr. Perle said.

He criticized the Soviet Union for violating previous arms control agreements and specifically men-

He criticized the Soviet Union for violating previous arms control agreements and specifically mentioned the Soviet retadar located in central Siberia. The radar has been challenged as a phased array system that could only be used for antiballistic missile defense — a violation of the 1972 Anti-Ballistic Missile treaty.

Shuttle photos to show site of Soviet nuclear accident

By John Holmes

The astronauts aboard the space shuttle Challenger last week photographed the site of a Soviet nuclear accident that has been shrouded in mystery for nearly three dec-

But the 2,400 photos taken by the shuttle's

ades.
But the 2,400 photos taken by the shuttle's camera — including those of the accident, site — will not be released for several months, and only after they have been reviewed for national security purposes; according to Shelby Tilford, civilian chief of NASA's earth science division.
In an article published yesterday, Aviation Week magazine said the shuttle crew took pictures of a 27-year-old nuclear accident site over Kyshtym, 800 miles east of Moscow. The settlement there has been evacuated for years and is believed still contaminated. U.S. government officials have long believed a nuclear reactor malfunction or an explosion of improperly buried nuclear waste might have caused the problem.

The astronauts photographed the area "at the request of Mike Matson, a scientist working with the land application and satellite data section of the National Oceanic and Atmospheric Administration (NOAA), according to a statement released yesterday afternoon by James Kukowski, a public affairs officier in NASA's space science division.

Mr. Matson's studies hope to "assess the

sion. Mr. Matson's studies hope to "assess the impact of radioactive contamination on vegetation," the statement said, adding that he is conducting "vegetation and deforestation studies" in various parts of the world, including the Amazon Basin and the Pacific Northwest.

"Basically, I'm looking for some sort of vegetation damage due to radiation," said

Mr. Matson. He said he had seen other satellite photos of the area, but that they weren't

clear enough for him to reach any definite conclusions as to the possibilities of radiation damage there.

Mr. Matson expects to get his first look at the photos "in six to nine weeks," he said. "They we got to get the camera off the shuttle, then get the film developed. And then the photos go through a review board, and even-tually I'll get them."

tually I'll get them."

The magazine, often referred to as "Aviation Leak" for its impressive record of industry scopps over the years, said the photos may show vegetation changes noar the area and may shed light on how the Soviets altered streams and lakes to stem the problem. American scientists hope the photos will help them better understand the effects of the accident and help them plan for any similar accidents in the United States or other friendly nations, the magazine said.

Soviet officials have never commented on

Soviet officials have never commented or

the accident.

Rather than following a typical orbital pattern around the Earth, the Challenger spent much of its time aloft in an orbit that carried it over three-fourths of the globe. To make maximum use of its many Earthsurvey cameras and sensors, the shuttle soared as far north as northern Canada and southern Sweden and as far south as northern Antarctica, and passed directly over the Soviet Union on many of its orbits.

The shuttle's 1400-pound camera, which

The shuttle's 1,400-pound camera, which is designed for mapping and is capable of photographing an area the size of Massachusetts in a single picture, uses two other lenses to take pictures of stars to help locate where the pictures were taken. Though not designed as a "spy" camera, its pictures are nonetheless highly accurate.